

Gina Harrison
Director
Federal Regulatory Relations

1275 Pennsylvania Avenue, N.W., Suite 400
Washington, D.C. 20004
(202) 383-6423

PACIFIC  **TELESIS**
Group-Washington

March 18, 1996

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Mr. William F. Caton
Acting Chief
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Re: *CS Docket No. 95-184, Telecommunications Services Inside Wiring Customer Premises Equipment.*

On behalf of Pacific Bell and Pacific Telesis Video Services, please find enclosed an original and six copies of their "Comments of Pacific Bell and Pacific Telesis Video Services" in the above proceeding.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,



Enclosures

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Before the
FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of

Telecommunications Services Inside Wiring

Customer Premises Equipment

CS Docket No. 95-184

**COMMENTS OF PACIFIC BELL AND
PACIFIC TELESIS VIDEO SERVICES**

LUCILLE M. MATES
SARAH RUBENSTEIN

140 New Montgomery Street, Rm. 1522A
San Francisco, California 94105
(415) 542-7649

MARGARET E. GARBER

1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 383-6472

PACIFIC TELESIS VIDEO SERVICES

BRUCE A. RAMSEY
KRISTIN A. OHLSON

2410 Camino Ramon, Suite 100
San Ramon, California 94583

Their Attorneys

Date: March 18, 1996

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**COMMENTS OF PACIFIC BELL AND
PACIFIC TELESIS VIDEO SERVICES**

I. SUMMARY

Pacific Bell and Pacific Telesis Video Services ("Pacific") hereby submit comments in response to the Commission's Notice of Proposed Rulemaking.¹ We support a change in the cable/broadband demarcation point, connection rules limited to the issue of signal leakage, greater customer control over and competitor access to cable inside wiring, federal preemption of state and local inside wiring rules, and adequate provisions for service provider access to private property. We discuss each of these positions in detail below.

¹ In the Matter of Telecommunications Services Inside Wiring, Notice of Proposed Rulemaking, CS Docket No. 95-184 (rel. Jan. 26, 1996) ("NPRM").

II. THE COMMISSION SHOULD MOVE THE CABLE /BROADBAND DEMARCATION POINT AND LEAVE THE TELEPHONY DEMARCATION POINT WHERE IT IS, BUT CLARIFY THAT THE TELEPHONY POINT APPLIES ONLY TO TWISTED PAIR WIRING

A. We Do Not Support the Establishment of a Common Telephony/Cable/Broadband Demarcation Point At This Time

The Commission asks whether it should establish a common demarcation point for all wireline communications networks, and if so, where the point should be located.² We do not support a common demarcation point at this time, because both broadband and telephony technology is in such a state of flux that it is too soon to know what the optimal point might be. We do, however, advocate moving the cable/broadband demarcation point closer to the existing telephony point, as we discuss below.

As telephony begins to be delivered by means other than the traditional twisted copper pair wiring, it may be that the demarcation point for telephony will have to change, especially in the MDU environment.³ We urge the Commission to leave this proceeding open so that it may inquire into the appropriate location of the telephony demarcation point as technology evolves. In the alternative, the Commission should modify the existing telephony rules to provide that they apply only to traditional twisted copper pair wiring.

² NPRM, ¶¶ 12-13.

³ For example, if a provider wishes to delivered telephony to a campus-style MDU over fiber, the existing twisted pair demarcation point, located at the minimum point of entry (“MPOE”) of the building housing the telephony equipment, may not provide the optimal incentive to switch to fiber. In such an environment, it may make more sense for the telephony demarcation point to be located within each building on the campus.

B. The Cable/Broadband Demarcation Point For Multiple Dwelling Units Should Be Changed So That It Is Located Where An Individual Customer's Dedicated Line Meets the Common Feeder Line

We propose that the cable and broadband demarcation point for MDUs be changed so that it is located where the line first becomes dedicated to an individual customer's use, but beyond the point at which the service provider must place electronics or related equipment. Stated differently, where electronic or other equipment is necessary -- for example, to amplify a signal -- the demarcation point should occur at the first practicable point that leaves such equipment on the provider's side of the demarcation point. Thus, we agree generally with the Commission's proposal that the demarcation point be placed "at the point at which the broadband . . . line becomes dedicated to an individual subscriber's use."⁴

We note that depending upon where they are located, channel management devices -- e.g., set top boxes and related equipment -- may need to remain on the customer's side of the demarcation point, and be characterized as Customer Premises Equipment ("CPE"). For example, if these devices are located at or near the television set, and the demarcation point is set beyond -- closer to the customer than -- the device, that point will be too close to the customer and hence will limit the amount of inside wiring the customer controls. Channel management devices located near the minimum point of entry, on the other hand, may not need to be so characterized. We suggest the Commission allow providers flexibility in this regard.

In conjunction with this change to the cable/broadband demarcation point, the building owner should be given the opportunity to purchase the inside wiring upon installation of service. In turn, the individual tenant -- the service provider's customer -- should gain pre-

⁴ NPRM, ¶¶ 12-13.

termination control (but not ownership) of the wiring on his side of the demarcation point, so that he may allow any provider to use his wiring to provide him video or other broadband service. In addition, the entity that installed and/or owns the wiring should be required to allow alternative providers access to it in order to provide service to the end user customer.

We make these suggestions because the current cable demarcation point does not give reasonable access to competitive providers of video services.⁵ As the Commission states, “the record in our cable home wiring proceeding . . . indicates that the current cable demarcation point in multiple dwelling unit buildings may impede competition in the video programming delivery marketplace.”⁶ We agree with the Commission’s comments, and for this reason propose a change both in the location of the cable demarcation point for MDUs, and in the nature of the rules governing who has control over such wiring. There are several advantages to our proposal.

1. Our Proposal Enhances Competition and Promotes Customer Choice

If individual dedicated lines are on the customer’s side of the demarcation point, then the customer gains control over his own wiring. The customer can then make his choice from among a whole range of video providers. Thus, the change promotes consumer choice and enhances the opportunities for competition among providers.

⁵ See *id.* We also advocate that once the Commission promulgates new cable inside wiring rules, it take a “fresh look” at any contract which gives incumbent cable providers exclusive rights to provide service to MDU owners’ buildings. Such exclusive agreements may diminish the effectiveness of any new Commission rules broadening access to cable inside wiring.

⁶ *Id.*, ¶ 17.

In addition, alternative providers may not have adequate financial incentives or resources to incur the significant expense of installing new customer inside wiring. By having access to existing wiring, they are allowed into the video services market without facing the hurdle of having to install new infrastructure. Our proposal also obviates the need for redundant wiring and investment.

2 Our Proposal Accommodates Property Owners

Second, building owners often are reluctant to allow alternative providers to install additional wiring because of the space it occupies and the disruption the installation causes. If customers control their individual inside wiring, and can allow alternative providers access to the wiring, they avoid the problems caused when new wiring is required. Thus, our approach respects the rights of property owners, who are understandably reluctant to allow each provider desiring access to building occupants to install its own inside wiring.

3 Our Proposal Accommodates Differing MDU Architecture

Third, our proposal to place the MDU demarcation point where an individual customer's dedicated line meets the common feeder line meets the Commission's concerns over the effect of architectural differences on the location of the demarcation point.⁷ A building's architecture will dictate the location of the demarcation point.

For example, in a high rise building, the point at which the customer's dedicated line meets the common feeder line is often in a utility closet on each floor. Feeder cable carrying common signal (signal for the use of all building occupants) runs from floor to floor through risers. Individual customers' lines, which are connected to the feeder cable via taps,

⁷ Id., ¶ 18.

then branch from this closet to each dwelling unit on the floor. With this architecture, a logical place for the demarcation point would be the utility closet on each floor. Alternative providers simply would be required to run their own feeder cable to each closet. (See Diagram 1 in Exhibit A attached to this document for a pictorial representation of the demarcation point in a high rise building.)

Garden style and low rise buildings typically are two stories high. The first common point of signal is often located in the basement, with individual subscriber lines running the full distance to units on the first and second floors. With this architecture, a logical place for the demarcation point would be the basement. Alternative providers simply would be required to run their own feeder cable to the basement location. (See Diagram 2 in Exhibit A attached to this document for a pictorial representation of the demarcation point in a low rise building.)

C. The Cable/Broadband Demarcation Point For Single Dwelling Units Should Be At A Point Comparable to The Existing Telephony Demarcation Point

The cable/broadband demarcation point in single dwelling units⁸ should be at a point that is equal to or comparable to the existing telephony demarcation point. That point generally is located on the side of a house, and the customer owns the wiring from his side of the protector to the telephone set. In the context of cable and other broadband services, this point should also be used, unless there is a need for amplifiers or other equipment (except channel management devices such as set top boxes)⁹ at a point closer to the customer's

⁸ See id., ¶ 15.

⁹ Providers should have the option of placing channel management devices on the customer's side of the demarcation point and classifying them as CPE.

television set. If such equipment is required, the demarcation point should be in the first practical location beyond this equipment (i.e., closer to the customer). (For a pictorial representation of the demarcation point in a single dwelling unit, see Diagram 3 in Exhibit A attached to this document.)

While the Commission does not define a single dwelling unit, we intend that the rule we propose apply not only to single family homes, but to small businesses with wiring that does not require intrabuilding network cable (“INC”) or a riser cable configuration.

D. The Commission Should Not Move The Telephony Demarcation Point, But Should Clarify That It Applies Only to Twisted Copper Pair Wiring

With regard to the twisted pair telephony wiring currently in use, we oppose moving the telephony demarcation point closer to the customer and to the current cable demarcation point.¹⁰ Such a change would tend to stifle competition because the cable demarcation point often is located in inaccessible areas inside a wall or a conduit.¹¹

In addition, the Commission notes that the existing cable wiring demarcation point “is closer to each subscriber.”¹² The closer the demarcation point is to the customer, the less wiring the customer controls. Giving customers control over their wiring increases competitors’ chances to gain access to these customers. Thus, moving the demarcation point closer to the customer (and thus shortening the span of wire over which the customer has control) would be a step in the wrong direction.

¹⁰ See NPRM, ¶ 16.

¹¹ Separate Statement of Commissioner Chong, at 2 (“I believe that the current [cable] demarcation point may be impeding competition in the multichannel video programming marketplace. . . .”); NPRM, ¶ 9.

¹² NPRM, ¶ 13.

Furthermore, it would be imprudent for the Commission to re-regulate copper pair telephone wiring on the customer's side of the demarcation point by moving that point closer to the cable demarcation point. We agree with the Commission that to "subject the currently unregulated telephone wiring between the minimum point of entry and the customer's premises to regulation . . . could . . . have a substantial effect on the markets for the installation and maintenance of inside wiring, . . . [and] raise accounting issues."¹³ Moreover, re-regulation of this wire would be inappropriate in today's deregulatory climate.¹⁴

However, the existing telephony inside wiring rules -- and the competitive market to which the rules gave rise -- were developed in an environment in which only twisted pair wiring was used to deliver telephony signals. Over time, use of copper pairs may well decrease as new uses -- e.g., fiber and coaxial cable -- evolve. Thus, while we do not believe the Commission should upset the current state of affairs by modifying the telephony inside wiring rules as they relate to twisted pair wiring, we do believe the time may soon come to reexamine the rules. Thus, we propose that the Commission leave room in its Order for such reexamination as telephony delivery mechanisms change, or change the existing rules to specify they apply only to twisted pair configurations. Because technology is changing so rapidly, flexibility will be necessary if the rules are to keep pace with these changes.

¹³ Id.

¹⁴ Moreover, to the extent the Commission currently lacks jurisdiction over telephony inside wiring on the customer's side of the demarcation point, it is not clear that the Commission has the authority to re-regulate this wiring.

E. The Commission May Allow Cable and Other Broadband Providers to Select a Demarcation Point In Collaboration With Premises Owners

As we note above, our proposed demarcation point may vary depending upon the location of amplifiers and other equipment. This variation will require that broadband service providers negotiate with individual premises owners in some cases to select the appropriate location of the demarcation point. We support giving providers this flexibility,¹⁵ as long as the demarcation point is located as we propose -- where the line first becomes dedicated to an individual customer's use, but beyond the point at which the service provider must place electronics or related equipment. Thus, for example, providers and premises owners may decide to place the demarcation point on one side of the building versus another, in the back of the building instead of the front, and still place the demarcation point in a place that conforms to our definition.

III. WHILE STANDARDS FOR SIGNAL LEAKAGE SHOULD APPLY TO ALL PROVIDERS, STANDARDS RELATED TO SIGNAL QUALITY, JACKS AND OTHER CONNECTORS SHOULD BE LEFT TO THE COMPETITIVE MARKETPLACE

The Commission next asks whether it should impose connection standards aimed at preventing signal leakage and standardizing jacks, connections and protectors on broadband facilities.¹⁶ We address each topic in turn.

¹⁵ See NPRM, ¶ 15 (seeking comment on whether incumbent cable providers should be allowed to choose the demarcation point).

¹⁶ Id., ¶¶ 24-25.

A. The Commission Should Have Rules Regarding Signal Leakage, But Competition Should Ensure Adequate Signal Quality

The Commission correctly notes that signal leakage only presents a problem for cable and other broadband services, because telephony signals currently operate at frequencies which do not interfere with other uses. Thus, the Commission appropriately focuses its attention on broadband signal leakage.¹⁷

A set of baseline safety standards applicable when signal leakage reaches some threshold¹⁸ will always be necessary given the safety hazards posed by leakage.¹⁹ We agree that there should be standards governing leakage over a certain threshold and mandating frequency separations from over-the-air users.²⁰ These standards should apply to all broadband service providers using facilities which pose a risk of leakage that has an impact on safety. We have no objection to those standards extending all the way to the television set or other similar equipment.

We do not agree, however, that the Commission should impose signal quality standards on providers. Signal quality is likely to evolve as a competitive selling point that distinguishes one broadband provider from another. Thus, the market will guarantee a minimum necessary level of signal quality and weed out those who cannot meet the standard.

¹⁷ Id., ¶¶ 20-22. We recognize that telephony offered over integrated hybrid fiber-coax (“HFC”) networks may someday use coaxial cable instead of twisted pairs to deliver the signal. However, our current plan for our HFC Advanced Communications Network is to install coaxial cable inside wiring for broadband services, and use twisted pair inside wiring for telephony. Should this change, we would support application of the signal leakage standards we propose for cable to telephone service.

¹⁸ See NPRM, ¶ 24.

¹⁹ See id., ¶ 25.

²⁰ Id., ¶ 24.

B. The Commission Should Rely on Standards Setting Organizations To Develop Broad Standards Governing the Means of Connection, But Should Refrain From Over-Regulating This Area

We support the adoption of limited, broadly defined connection standards for broadband networks.²¹ These standards should be set in consultation with reputable, international standards setting organizations. The appropriate aim of the standard-setting process, however, should be on developing baseline standards for a “universal connection device” located at the demarcation point to which all providers -- broadband as well as narrowband -- can connect their facilities.²² Such a device should ensure adequate security against accidental or intentional, unauthorized disconnection by one provider of another provider’s customers.²³

However, the type of wiring, connectors, protectors or other connection devices providers use to connect to this universal connection device should be left to the competitive marketplace so as not to squelch innovation.²⁴ So long as providers adhere to the standards relating to signal leakage, they should be allowed to choose the materials they will use to make connections to the universal connection device. If providers’ materials are inadequate to attract and maintain customers, the market will dictate that they make changes in their equipment in order to remain competitive.

²¹ See *id.*, ¶ 29.

²² *Id.*, ¶ 30.

²³ We understand Ameritech has some ideas regarding means of ensuring provider security in a competitive environment, and encourage the Commission to look at Ameritech’s presentation.

²⁴ NPRM, ¶ 29.

IV. CUSTOMERS SHOULD HAVE CONTROL OVER THEIR INSIDE WIRING

A. Customers Should Be Given Greater Control Over Their Cable Inside Wiring, Provided The Operator Receives Adequate Compensation

The Commission next asks whether customers should be given access to cable home wiring before they terminate their broadband service.²⁵ We support such a change. We agree that the rules governing customer access to twisted pair telephony inside wiring should not change at this time.²⁶

We believe the rules governing customers' and premises owners' access to cable and broadband inside wiring on the customer's side of the demarcation point should allow premises owners to own, and end-user customers to control provider access to such wiring even before they terminate service.²⁷ Moreover, we do not believe that competition alone will move the cable rules in the direction of affording consumers greater control over their wiring. Commission intervention will be required in order to "promote consumer choice; . . . foster competition among multichannel video programming service providers, thus lowering prices and encouraging technological innovation; and . . . facilitate the provision of more than one type of telecommunications service by [a single entity]."²⁸

However, at least as to new installations, such access should be conditioned upon payment of compensation to the provider which installed the wiring. In addition, the rules relating to such compensation should be reformed. Currently, the cable rules provide that

²⁵ Id., ¶ 42.

²⁶ See id.

²⁷ See id., ¶ 43.

²⁸ See id., ¶¶ 44, 46.

customers must pay providers only the replacement cost of the wire itself in order to gain ownership of the inside wiring.²⁹ However, the majority of the expense in wiring a building lies in the labor costs, rather than in the materials. If inside wiring is to be deregulated and building owners given the right to purchase new wiring after installation, the installing provider should receive payment for the entire cost of the installation, including the labor costs. Otherwise, a provider runs the risk of installing the wiring, quickly losing the customer to another provider, and receiving only the insignificant replacement cost of the wire itself. Thus, our proposal to allow customers pretermination ownership of inside wiring must be accompanied by appropriate compensation rules in order to ensure fairness and adequate cost recovery.

Once the new rules are in place, customers (or, in an MDU environment, building owners) should be given the option upon initiation of service of installing their own wiring, paying the service provider to install it, or contracting with a third party to do the installation. The service provider should be required to provide the customer with the technical specifications necessary to install the wiring, and the customer should be required to meet these technical specifications, and any Commission-imposed or other regulatory standards, before the provider becomes obligated to deliver its signal to the customer.

²⁹ 47 C.F.R. § 76.801 (“[Replacement] cost is to be determined based on the replacement cost per foot of cabling multiplied by the length in feet of the cable home wiring.”).

B. The Commission Has The Authority To Allow Pre-Termination Access to Cable Inside Wiring

The Commission next asks whether it has authority to promulgate cable inside wiring rules requiring pretermination access, and if so, the basis of this authority.³⁰ There is every reason to conclude that if the Commission had the authority to change the rules governing telephony inside wiring, it has the same authority with regard to cable and broadband wiring. In deregulating telephony inside wiring, the Commission held that “the legal authority for our detariffing of inside wiring is the same that we relied upon to detariff CPE in Computer II.”³¹ The Commission should make the same determination here.

V. THE FCC SHOULD PREEMPT STATE AND LOCAL REGULATION OF TELEPHONY AND CABLE INSIDE WIRE

The Commission next seeks comment on which body -- federal, state or local, or some combination of the three -- should enforce rules governing technical performance of cable systems, disposition of wiring upon service termination, and rates for installation, maintenance and sale of cable wiring and equipment.³² For simplicity of application, the Commission should preempt this area. Multiple regulators increase costs and inconsistency.³³

³⁰ See NPRM, ¶¶ 45-46.

³¹ In the Matter of Detariffing the Installation and Maintenance of Inside Wiring, Second Report and Order, 59 Rad. Reg. 2d 1143, ¶ 2, n.3 (1986), citing Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry, or Computer II), 77 FCC 2d 384 (1980) (Final Decision), reconsideration, 84 FCC 2d 540 (1981) (Reconsideration Decision), further reconsideration, 88 FCC 2d 512 (1981), aff’d sub nom. Computer and Communications Industry Ass’n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983).

³² NPRM., ¶ 52.

³³ For example, local franchising agencies may promulgate technical rules or specifications that conflict with the Commission’s rules, leaving the broadband provider in a quandary. We urge the Commission -- which has demonstrated technical expertise -- to look for ways to avoid such

Moreover, the new Act removes rate regulation for cable service and equipment in systems facing effective competition. The Commission should follow this lead by reducing its oversight of both telephony and cable inside wire. Thus, we recommend an approach that not only reduces to one the number of regulators with authority over inside wiring, but also streamlines the regulations the Commission imposes.

VI. SERVICE PROVIDERS MUST HAVE ACCESS TO PRIVATE PROPERTY

The Commission next seeks comment on the current rules governing telephone companies' and cable operators' access to private property, and asks whether the rules should be harmonized.³⁴ We believe broad rights of access will foster competition in the broadband marketplace, and welcome any steps the Commission believes it can take to guarantee such access.

VII. CONCLUSION

We urge the Commission to change the cable/broadband demarcation point, build in flexibility with regard to the telephony demarcation point, refrain from over-regulating connection technology and equipment, give customers and alternative providers greater control over and access to cable inside wiring, preempt state and local regulation of inside wiring to the greatest extent possible, and ensure adequate service provider access to private property. We

inconsistencies. And as the Commission reiterated recently, preemption of state and local regulation is appropriate to "assure 'to all the people of the United States a rapid, efficient, Nation-wide and world-wide wire and radio communication service with adequate facilities at reasonable charges.'" Preemption of Local Zoning Regulation of Satellite Earth Stations, IB Docket No. 95-59, DA 91-577, 45-DSS-MISC-93, Report and Order, Further Notice of Proposed Rulemaking, FCC 96-78 (rel. March 11, 1996), at ¶¶ 10 et seq.

³⁴ NPRM, ¶¶ 62-64.

believe our proposals will help foster competition in the cable and broadband services markets and enhance customer options as telecommunications moves into the 21st Century.

Respectfully submitted,

PACIFIC BELL

A handwritten signature in cursive script, appearing to read "Sarah Rubenstein", written over a horizontal line.

LUCILLE M. MATES
SARAH RUBENSTEIN

140 New Montgomery Street, Rm. 1522A
San Francisco, California 94105
(415) 542-7649

MARGARET E. GARBER

1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 383-6472

PACIFIC TELESIS VIDEO SERVICES

BRUCE A. RAMSEY
KRISTIN A. OHLSON

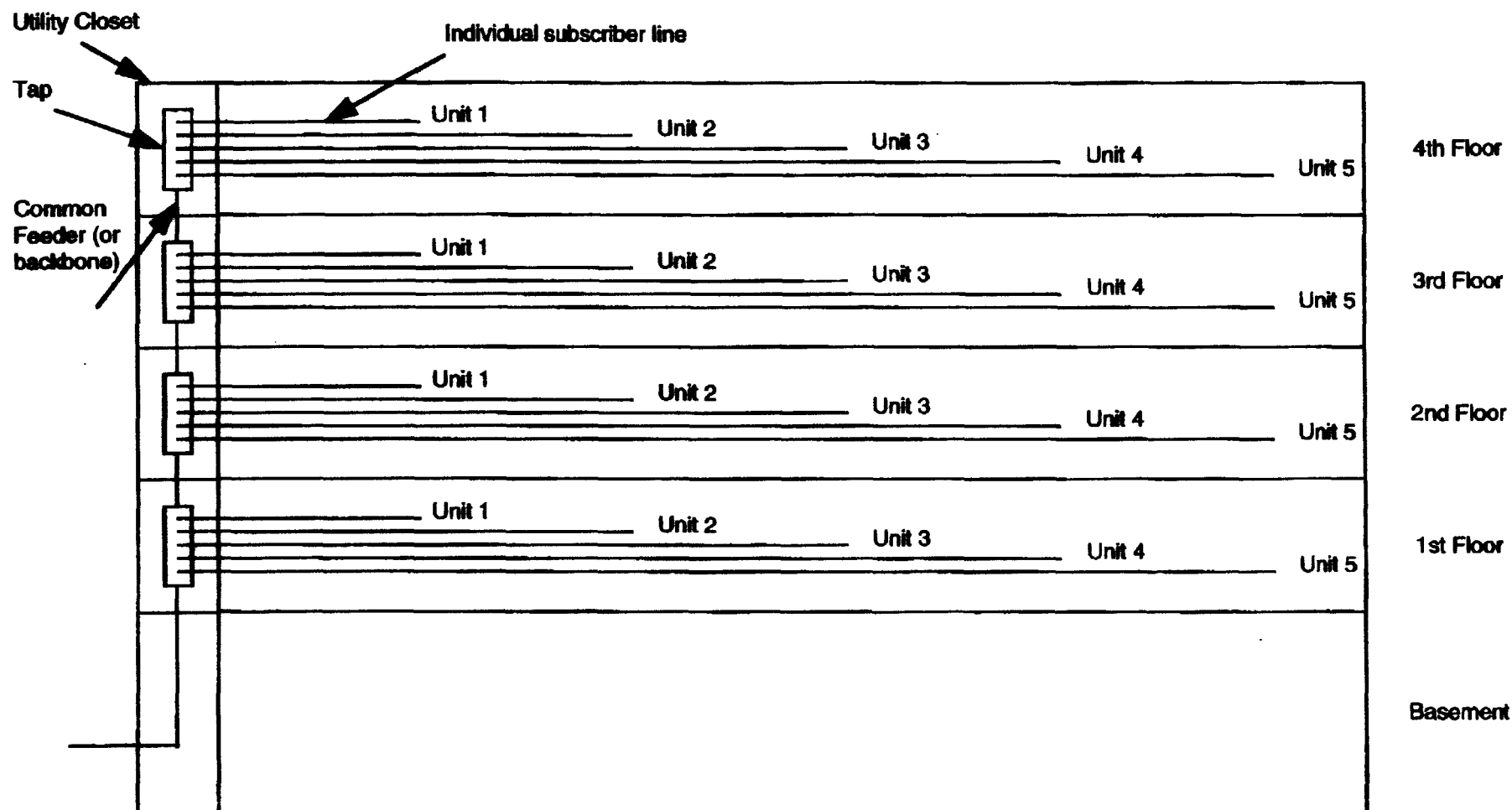
2410 Camino Ramon, Suite 100
San Ramon, California 94583

Their Attorneys

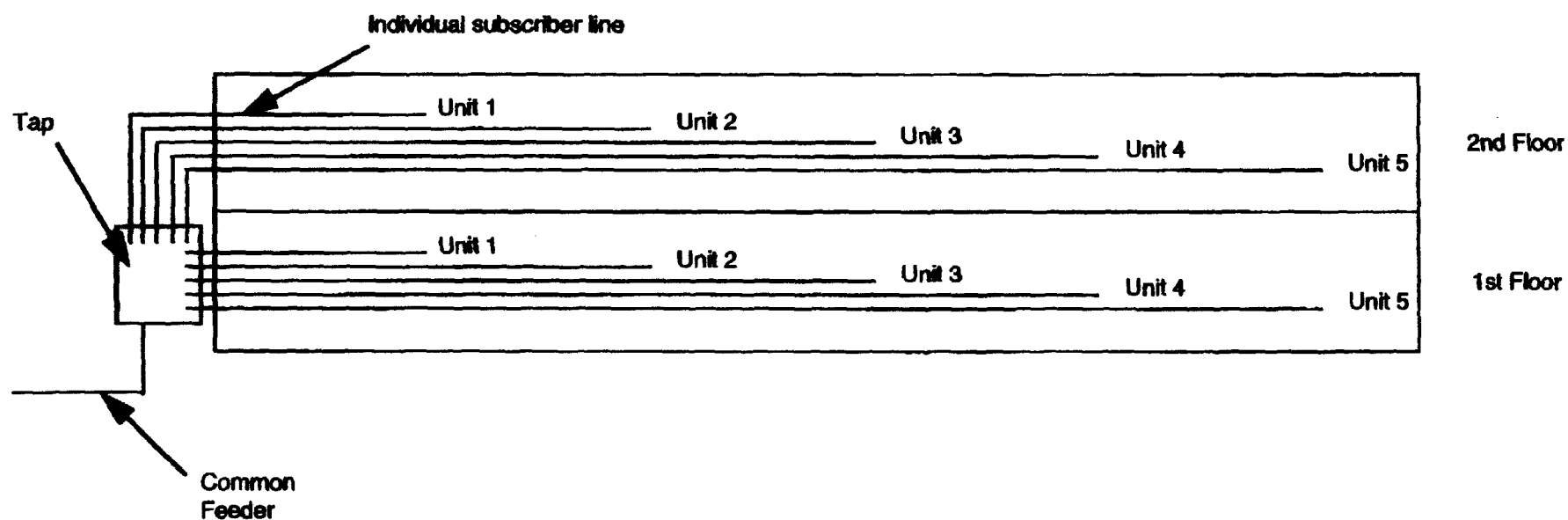
Date: March 18, 1996

Exhibit A

Typical High Rise Scenario: First point where individual subscriber lines meet common feeder is at the tap on each floor.



Typical Low Rise Scenario: First point where individual subscriber lines meet common feeder is at the tap on the first floor.



Typical Single Family Home Scenario: Demarcation point is located on the side of the house.

